

CLAIMS:

1. A remote maintenance data system comprising a central server, the central server comprising:
 - 5 a receiving means arranged in the central server to receive status information about a plurality of electronic devices that from time to time require maintenance, that status information being transmitted from the devices to the central server directly or via one or more intermediary
10 devices, the transmission of the status information being initiated by the devices and/or the intermediary devices; and
 - a sending means arranged in the central server to send a message, based on the status information, to an entity
15 relevant to a particular electronic device, that enables the entity to obtain from the central server status information about the device.
2. A remote maintenance data system as claimed in claim 1,
20 further comprising an analysing means for analysing the received status information.
3. A remote maintenance data system as claimed in claim 2,
wherein the analysing means determines, depending on the
25 received status information, if a said message is to be sent to a relevant entity or not.
4. A remote maintenance data system as claimed in claim 2,
wherein the analysing means determines, depending on the
30 received status information, when a said message is to be sent to a relevant entity.
5. A remote maintenance data system as claimed in claim 2,
wherein the analysing means determines, depending on the

received status information, to which relevant entity the message is to be sent.

6. A remote maintenance data system as claimed in claim 2,
5 wherein the analysing means determines, according to condition data, if a said message is to be sent to a relevant entity or not.

7. A remote maintenance data system as claimed in claim 2,
10 wherein the analysing means generates the message.

8. A remote maintenance data system as claimed in claim 1,
wherein the central server has access to a database for storing data, wherein status information received by the
15 central server is stored in the database.

9. A remote maintenance data system as claimed in claim 8,
wherein the analysing means has access to data stored in the database.
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10. A remote maintenance data system as claimed in claim 1,
wherein status information, sent to the central server, includes a first type of status information indicating the need of maintenance of at least one of the electronic
25 devices and a second type of information about the usage of at least one of the electronic devices.

11. A remote maintenance data system as claimed in claim 1,
wherein status information, sent to the central server,
30 includes information for the identification of the electronic devices.

12. A remote maintenance data system as claimed in claim 1,
wherein a said message contains at least part of the status
35 information about a said particular electronic device.

13. A remote maintenance data system as claimed in claim 12
wherein the status information provided by the central
server in the said message to the entity is supplemented
5 with additional relevant data from a database accessible to
the central server.

14. A remote maintenance data system as claimed in claim 1,
wherein the entity has access to at least one service
10 management computer system containing data about at least
some of the devices about which the entity is sent the
said messages.

15. A remote maintenance data system as claimed in claim 1,
wherein at least part of the status information supplied by
the central server is supplemented with additional relevant
data from a database accessible to the central server.

16. A remote maintenance data system as claimed in claim 1,
20 wherein the said message comprises a hypertext link, the
central server comprises a web server, and the said web
server is arranged to respond to the said link being
activated to provide the said status information.

25 17. A remote maintenance data system as claimed in claim 1,
wherein data provided by the central server to an entity,
or the form of that data, depends on the entity.

18. A remote maintenance data system as claimed in claim 1,
30 wherein the central sever is arranged to receive data from
a service management computer system.

19. A remote maintenance data system as claimed in claim
18, wherein the data received from the service management

computer system includes data about the devices serviced by the said service management system.

20. A remote maintenance data system as claimed in claim 1,
5 wherein the central server is arranged to transmit data to a service management computer system.

21. A remote maintenance data system as claimed in claim
20, wherein the data transferred includes data about the
10 usage of an electronic device.

22. A remote maintenance data system as claimed in claim
21, wherein data relating to the usage of an electronic
device is transferred directly to at least one service
15 management computer system, without requiring operator
intervention.

23. A remote maintenance data system as claimed in claim
21, wherein said data about the usage of an electronic
20 device is sent to said service management computer system
in batches.

24. A remote maintenance data system as claimed in claim
23, wherein said data about the usage of an electronic
25 device is sent to said service management computer system
once a threshold condition has been met.

25. A remote maintenance data system as claimed in claim 1,
wherein the central server comprises a mail server having
30 different mailboxes for receiving status information from
different electronic devices, or sets of devices.

26. A remote maintenance data system as claimed in claim 1,
wherein the central server comprises a mail server having
35 different mailboxes for receiving from an electronic device

status information indicating that the device requires attention and for receiving status information regarding the usage of the device.

5 27. A remote maintenance data system as claimed in claim 1, wherein status information for a set of devices is relayed by a common unit to the central server.

10 28. A remote data maintenance system as claimed in claim 27, wherein the central server is arranged to provide a report of which electronic devices provide status information to the common unit.

15 29. A remote data maintenance system as claimed in claim 27, wherein the central server is arranged to provide a single report of status information about a plurality of the electronic devices that provide status information to the common unit.

20 30. A remote maintenance data system as claimed in claim 1, wherein the central server is arranged to provide a history of status information about a particular electronic device.

25 31. A remote maintenance data system as claimed in claim 1, wherein the central server is arranged to provide an analysis of faults or usage over a plurality of electronic devices.

30 32. A remote maintenance data system as claimed in claim 1, wherein the said entity is given access to status information relating to one or more electronic devices to which it is not relevant.

35 33. A remote maintenance data system as claimed in claim 1, wherein the system further comprises:

the said plurality of electronic devices, and
a plurality of different service management computer
systems, the central server being arranged to send the said
messages to users of those service management computer
5 systems.

34. A remote maintenance data system comprising a central
server, the central server comprising:

a receiver arranged in the central server to receive
10 status information about a plurality of electronic devices
that from time to time require maintenance, that status
information being transmitted from the devices to the
central server directly or via one or more intermediary
devices, the transmission of the status information being
15 initiated by the devices and/or the intermediary devices;
and

a transmission module arranged in the central server
to send a message, based on the status information, to an
entity relevant to a particular electronic device, that
20 enables the entity to obtain from the central server status
information about the device.

35. A remote maintenance data system as claimed in claim
34, wherein the receiver is a mail server.
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36. A remote maintenance data system as claimed in claim
34, wherein the transmission module is a mail server.

37. A remote maintenance data system comprising:
30 a central server arranged to receive status
information about a plurality of electronic devices that
from time to time require maintenance, that status
information being transmitted from the devices to the
central server directly or via one or more intermediary
35 devices; and

a web server arranged to communicate with the central server,

wherein:

the central server is further arranged to send a
5 message containing information based on the status information to an entity relevant to a particular electronic device, said message comprising a hypertext link; and

the said web server, having access to at least the
10 status information relevant to the particular electronic device, is arranged to respond to the said link being activated to provide the said status information.

38. A remote maintenance data system as claimed in 37,
15 wherein the central server or the web server comprises a means for analysing the received status information.

39. A remote maintenance data system as claimed in claim 37, wherein the central server or the web server has access
20 to a database for storing data, wherein status information received by the server is stored in the database.

40. A remote maintenance data system as claimed in claim 39, wherein the analysing means has access to data stored
25 in the database.

41. A method of interfacing a plurality of electronic devices that from time to time require maintenance, comprising:

30 transmitting status information from the device to a central server, directly or via one or more intermediary devices; and

transmitting a message, to an entity relevant to a particular electronic device, that enables the entity to

obtain from the central server status information about the device,

wherein the transmission of the status information is initiated by the devices and/or the intermediary devices.

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42. A method of interfacing as claimed in claim 41, wherein the central server comprises a means for analysing the received status information.

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43. A method of interfacing as claimed in claim 42, wherein the analysing means determines, depending on the received status information, if a said message is to be sent to a relevant entity or not.

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44. A method of interfacing as claimed in claim 42, wherein the analysing means determines, depending on the received status information, when a said message is to be sent to a relevant entity.

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45. A method of interfacing as claimed in claim 42, wherein the analysing means determines, depending on the received status information, to which relevant entity the message is to be sent.

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46. A method of interfacing as claimed in claim 42, wherein the analysing means determines, according to condition data, if a said message is to be sent to a relevant entity or not.

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47. A method of interfacing as claimed in claim 42, wherein the analysing means generates the message.

48. A method of interfacing as claimed in claim 41, wherein the central server has access to a database for storing

data, wherein status information received by the central server is stored in the database.

49. A method of interfacing as claimed in claim 48, wherein
5 the analysing means has access to data stored in the database.

50. A method of interfacing as claimed in claim 41, wherein
status information, sent to the central server, includes a
10 first type of status information indicating the need of maintenance of at least one of the electronic devices and a second type of information about the usage of at least one of the electronic devices.

15 51. A method of interfacing as claimed in claim 41, wherein status information, sent to the central server, includes information for the identification of the electronic devices.

20 52. A method of interfacing as claimed in claim 41, wherein a said message contains at least part of the status information about a said particular electronic device.

53. A method of interfacing as claimed in claim 52, wherein
25 the status information provided by the central server in the said message to the entity is supplemented with additional relevant data from a database accessible to the central server.

30 54. A method of interfacing as claimed in claim 41, wherein the entity has access to at least one service management computer system containing data about at least some of the devices about which the entity is sent the said messages.

55. A method of interfacing as claimed in claim 41, wherein at least part of the status information supplied by the central server is supplemented with additional relevant data from a database accessible to the central server.

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56. A method of interfacing as claimed in claim 41, wherein the said message comprises a hypertext link, the central server comprises a web server, and the said web server is arranged to respond to the said link being activated to

10 provide the said status information.

57. A method of interfacing as claimed in claim 41, wherein data provided by the central server to an entity, or the form of that data, depends on the entity.

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58. A method of interfacing as claimed in claim 41, comprising transmitting data from a said entity to the central server.

20 59. A method of interfacing as claimed in claim 58, wherein the data transmitted includes data about the devices serviced by the said entity.

60. A method of interfacing as claimed in claim 41,
25 comprising transmitting data from the central server to a said entity.

61. A method of interfacing as claimed in claim 60, wherein the data transmitted includes data about the usage of an
30 electronic device.

62. A method of interfacing as claimed in claim 41, wherein the central sever is arranged to receive data from a service management computer system.

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63. A method of interfacing as claimed in claim 62, wherein the data received from the service management computer system includes data about the devices serviced by the said service management system.

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64. A method of interfacing as claimed in claim 41, wherein the central server is arranged to transmit data to a service management computer system.

10 65. A method of interfacing as claimed in claim 64, wherein the data transferred includes data about the usage of an electronic device.

15 66. A method of interfacing as claimed in claim 65, wherein data relating to the usage of an electronic device is transferred directly to at least one service management computer system, without requiring operator intervention.

20 67. A method of interfacing as claimed in claim 65 or claim 66, wherein said data about the usage of an electronic device is sent to said service management computer system in batches.

25 68. A method of interfacing as claimed in claim 67, wherein said data about the usage of an electronic device is sent to said service management computer system once a threshold condition has been met.

30 69. A method of interfacing as claimed in claim 41, wherein the transmitting of the status information from the devices to the central server is by email that is addressed differently for status information from different electronic devices.

70. A method of interfacing as claimed in claim 41, wherein the transmitting of the status information from the devices to the central server is by email that is addressed differently for indications that the device requires
5 attention and for information regarding the usage of the device.

71. A method of interfacing as claimed in claim 41, wherein status information for a set of devices is relayed by a
10 common unit to the central server.

72. A method of interfacing as claimed in claim 71, wherein the central server is arranged to provide a report of which electronic devices provide status information to the common
15 unit.

73. A method of interfacing as claimed in claim 71, wherein the central server is arranged to provide a single report of status information about a plurality of the electronic
20 devices that provide status information to the common unit.

74. A method of interfacing as claimed in claim 41, wherein the central server is arranged to provide a history of status information about a particular electronic device.
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75. A method of interfacing as claimed in claim 41, wherein the central server is arranged to provide an analysis of faults or usage over a plurality of electronic devices.

30 76. A method of interfacing as claimed in claim 41, wherein the said entity is given access to status information relating to one or more electronic devices to which it is not relevant.

77. A method of interfacing a plurality of electronic devices that from time to time require maintenance comprising:

transmitting status information from the devices to a
5 central server, directly or via one or more intermediary devices,

transmitting a message containing information based on said status information, to an entity relevant to a particular electronic device, said message comprising a
10 hypertext link; and

providing a web server that has access to at least the status information relevant to the particular electronic device, said web server responding to the activation of the hypertext link to provide the said status information.

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78. A method of interfacing of interfacing as claimed in claim 77, wherein the central server or the web server comprises a means for analysing the received status information

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79. A method of interfacing as claimed in claim 78, wherein the central server or the web server has access to a database for storing data, wherein status information received by the server is stored in the database.

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80. A method of interfacing as claimed in claim 79, wherein the analysing means has access to data stored in the database.

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81. A method of interfacing as claimed in claim 77, wherein the transmission of status information is initiated by the said device or intermediary devices.